

REMARKS

In the Office Action, claim 2 is rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Claims 1-4 are rejected under 35 U.S.C. §103(a) as being unpatentable over Okamoto et al. in view of Bouchard et al. and Takeuchi et al.

In response to the rejection under 35 U.S.C. §112, the above amendment has amended a sentence in the paragraph between lines 8-24 on page 6 of the specification to read as “The adhesive material 213 may be a thermal adhesive such as a hot melt glue or a soluble material, an organic material, an inorganic material or a strippable material”. With reference to the paragraph between lines 8-24, the original sentence has already disclosed and exemplified all the adhesive materials recited in claim 2 except for “a hot melt glue”. The amended sentence further includes “the hot melt glue” recited in claim 2. As can be seen in the paragraph, the specification has disclosed: “FIG. 2B shows a step of melting the adhesive material 213. As the adhesive material 213 is heated, it will be soften and attached on the triode structure surface of the CNT-FED closely and uniformly”. Applicant respectfully submits that the amended specification has complied with the written description requirement to support claim 2 and overcome the rejection under 35 U.S.C. §112 without adding new matter.

In the detailed action, the examiner cites Okamoto, Bouchard and Takeuchi to reject claims 1-4 under 35 U.S.C. §103(a). The examiner admits that Okamoto fails to teach that the adhesive material can be heated and melted for attaching the adhesive to the triode structure of the FED but rejects the claims on the ground that Bouchard teaches

that any material can be used as the particular adhesive and Takeuchi teaches that a hot melt adhesive was a well know type of adhesive. Applicant respectfully contends that the rejection is unfounded and does not comply with the obviousness requirement set forth in MPEP2144.07.

Applicant likes to point out again that in the instant invention, the purpose of heating the adhesive material is to melt the adhesive material so that it is in a paste state that can flow into the triode structure surface. In other words, the step of heating and melting the adhesive is not a selection of a known material for the adhesive. It is a critical manufacturing step that applicant discovered to increase the number of carbon nanotubes exposed on a triode structure of a CNT-FED.

As admitted by the examiner, Okamoto does not disclose heating and melting an adhesive for attaching said adhesive material on a triode structure surface of said CNT-FED. Nowhere has the disclosure of Bouchard taught or suggested heating and melting the adhesive so that the adhesive can flow into triode structure surface and be better attached to the triode structure surface of the CNT-FED for increasing the number of carbon nanotubes. Although Bouchard teaches that any material can be used as the particular adhesive, the concept of heating and melting an adhesive in the instant invention is significantly different from selecting a different adhesive material.

With regard to the examiner's comment of Takeuchi, applicant respectfully contends that combining Takeuchi with Bouchard and Okamoto to reach the instant invention is groundless. First of all, although Takeuchi teaches using holt-melt adhesive in a display apparatus, the display device of Takeuchi has nothing to do with a CNT-

FED. More importantly, the hot-melt adhesive of Takeuchi is used for a completely different purpose. The adhesive of Takeuchi has a refractive index substantially the same as the refractive indexes of the optical waveguide panel ([0157]). The adhesive has a good light transmittance in the visible wavelength range and is stable over a long period of time with respect to heat, light and humidity. The adhesive is not intended to be attached to a surface and then peeled off. It would not be obvious for a person of ordinary skill in the art to connect Takeuchi's hot-melt adhesive with the adhesive of Bouchard and Okamoto because the two are intended for different purposes and used in different ways. It would certainly not be logical for a person to combine Takeuchi, Bouchard and Okamoto to reach a manufacturing step of "heating and melting an adhesive" for the purpose of increasing the number of carbon nanotubes.

From the above analysis, applicant respectfully contends that "heating and melting the adhesive" recited in claim 1 is a critical step of the method in the instant invention rather than a selection of known material and therefore the rejection under 35 U.S.C. §103(a) is not in compliance with MPEP 2144.07. Because none of the cited prior arts teaches a step of heating and melting said adhesive material for attaching said adhesive material on a triode structure surface of said CNT-FED, claim 1 should be allowable. By virtue of dependency, claims 2-4 should also be allowable.

From the foregoing discussion, applicant respectfully concludes the instant invention should be patentable and claims 1-4 are in full condition for allowance under 35 U.S.C. §112 and 35 U.S.C. §103(a). Prompt and favorable reconsideration of the application is respectfully solicited.

Respectfully submitted,

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